UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,269	06/27/2002	Ruthie D. Lyle	RPS920020082	2687

			EXAMINER
25299	7590	11/16/2005	MEEK, JACOB M

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ART UNIT	PAPER NUMBER
2637	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		10/064,269	LYLE ET AL.
		Examiner	Art Unit	
		Jacob Meek	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _27 June 2002_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1 - 20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1 - 20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _27 June 2002_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.   Claims 1 - 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Souissi et al (US-6,553,060).

With regard to claim 1, Souissi discloses a wireless communications method comprising:

scanning the channels for interference and identifying channels experiencing interference

(see column 2, lines 49 – 52); transmitting normal data when hopping to a channel not

identified as experiencing interference (see column 2, lines 54 –66). Souissi is silent with

respect to transmission of null packets on channels experiencing interference. Souissi

discloses the use of best available channels (see column 2, lines 49 – 52) which eliminates

interfered channels and obviates the need for transmission of null packets over interference

channels which appears to be a simpler technique, and therefore would have been obvious to

one of ordinary skill in the art at the time of invention.

With regard to claim 2, Souissi discloses a wireless communications method wherein the

scanning step is performed upon commencement of data transmission (see column 2, lines

61 – 66 where this is interpreted as equivalent).

With regard to claim 3, Souissi discloses a wireless communications method wherein

the scanning step is performed upon each passage of a 1st time period (see column 2, lines

49 – 52 where this is interpreted as equivalent).

With regard to claim 4, Souissi discloses a wireless communications method wherein the scanning step is repeated periodically during data transmission (see figure 3, and column 4, lines 54 – 65 where this is interpreted as equivalent).

With regard to claim 5, Souissi discloses a wireless communications method wherein the scanning step is performed upon when a data throughput falls below a predefined value (see column 3, lines 56 – 58 where this is interpreted as equivalent).

With regard to claim 6, Souissi discloses a wireless communications method wherein the scanning step is performed when requested by user (see column 2, lines 57 – 66 where this is interpreted as equivalent).

With regard to claim 7, Souissi discloses a wireless communications method wherein the scanning step is repeated whenever: a) 2nd time period has passed (see figure 3, and column 4, lines 54 – 65 where this is interpreted as equivalent); b) a data throughput falls below a predefined value (see column 3, lines 56 – 58 where this is interpreted as equivalent); or c) requested by user (see column 2, lines 57 – 66 where this is interpreted as equivalent).

With regard to claims 8 and 10, Souissi discloses a wireless communications method wherein the communications architecture is standard known as Bluetooth (see column 1, lines 29 – 46).

With regard to claims 9 and 11, Souissi is silent with respect to IEEE 802.15.1. IEEE 802.15.1 is based on Bluetooth standard and therefore would have been obvious to one of ordinary skill in the art at the time of invention (see column 1, lines 29 – 46).

With regard to claim 12, Souissi discloses a wireless communications method in ISM band using Bluetooth (see column 2, lines 52 – 53) comprising: scanning the channels for interference and identifying channels experiencing interference (see column 2, lines 49 – 52); transmitting normal data when hopping to a channel not identified as experiencing

interference (see column 2, lines 54 –66). Souissi is silent with respect to transmission of null

packets on channels experiencing interference and power up operation. Souissi discloses

the use of best available channels (see column 2, lines 49 – 52) which eliminates interfered

channels and obviates the need for transmission of null packets over interference channels

which appears to be a simpler technique, and therefore would have been obvious to one of

ordinary skill in the art at the time of invention. Soussi's method would require a power up

sequence for the establishment of network and therefore would have been obvious to one of

ordinary skill in the art at the time of invention.

With regard to claim 13, Souissi discloses a wireless communications method wherein

the scanning step is repeated periodically during data transmission (see figure 3, and column

4, lines 54 – 65 where this is interpreted as equivalent).

With regard to claim 14, Souissi discloses a wireless communications method wherein

the scanning step is performed upon when a data throughput falls below a predefined value

(see column 3, lines 56 – 58 where this is interpreted as equivalent).

With regard to claim 15, Souissi discloses a wireless communications method wherein

the scanning step is performed when requested by user (see column 2, lines 57 – 66 where

this is interpreted as equivalent).

With regard to claim 16, Souissi discloses a wireless communications method wherein

the scanning step is repeated whenever: a) 3rd time period has passed (see figure 3, and

column 4, lines 54 – 65 where this is interpreted as equivalent); b) a data throughput falls

below a predefined value (see column 3, lines 56 – 58 where this is interpreted as

equivalent); or c) requested by user (see column 2, lines 57 – 66 where this is interpreted as

equivalent).

With regard to claim 17, Souissi discloses a wireless communications method in ISM

band using Bluetooth (see column 2, lines 52 – 53) comprising: scanning the channels for

interference and identifying channels experiencing interference (see column 2, lines 49 – 52);

transmitting normal data when hopping to a channel not identified as experiencing

interference (see column 2, lines 54 –66). Souissi is silent with respect to transmission of null

packets on channels experiencing interference and power up operation. Souissi discloses

the use of best available channels (see column 2, lines 49 – 52) which eliminates interfered

channels and obviates the need for transmission of null packets over interference channels

which appears to be a simpler technique, and therefore would have been obvious to one of

ordinary skill in the art at the time of invention. Soussi's method would require a power up

sequence for the establishment of network and therefore would have been obvious to one of

ordinary skill in the art at the time of invention. Souissi is silent with respect to IEEE

802.15.1. IEEE 802.15.1 is based on Bluetooth standard and therefore would have been

obvious to one of ordinary skill in the art at the time of invention (see column 1, lines 29 – 46).

With regard to claim 18, Souissi discloses a wireless communications method wherein

the scanning step is performed upon when a data throughput falls below a predefined value

(see column 3, lines 56 – 58 where this is interpreted as equivalent).

With regard to claim 19, Souissi discloses a wireless communications method wherein

the scanning step is performed when requested by user (see column 2, lines 57 – 66 where

this is interpreted as equivalent).

With regard to claim 20, Souissi discloses a wireless communications method wherein

the scanning step is repeated whenever: a) 4th time period has passed (see figure 3, and

column 4, lines 54 – 65 where this is interpreted as equivalent); b) a data throughput falls

below a predefined value (see column 3, lines 56 – 58 where this is interpreted as

equivalent); or c) requested by user (see column 2, lines 57 – 66 where this is interpreted as equivalent).

Other Cited Prior Art

2.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nevo et al (US-6,891,857) discloses method and apparatus for interference reduction for wireless networks.

Hashimoto et al (US-6,788,654) discloses digital receiver with insertion of null packets in the presence of interference.

Heubel (US-6,771,968) discloses interference protection in wireless office systems.

Tuomela et al (US 2003/0235179) discloses interference reduction in Bluetooth networks.

Hslany (US-6,603,799) discloses interference detection method for wireless network.

Wallstedt et al (US-6,466,793) discloses an interference reduction technique for wireless applications.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Meek whose telephone number is (571)272-3013. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system. Status information for published applications
may be obtained from either Private PAIR or Public PAIR. Status information for unpublished
applications is available through Private PAIR only. For more information about the PAIR
system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private
PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMM
11/9/05

TEMESGHEN GHEBRETINSAE
PRIMARY EXAMINER